AGENDA

ASSEMBLY BUDGET SUBCOMMITTEE No. 3 ON CLIMATE CRISIS, RESOURCES, ENERGY, AND TRANSPORTATION

ASSEMBLYMEMBER RICHARD BLOOM, CHAIR

WEDNESDAY, JUNE 1, 2022

2:00 P.M. - STATE CAPITOL, ROOM 444

INFORMATIONAL HEARING: MAY REVISION ENERGY PROPOSALS

I. Opening remarks and introductions

II. Overview of Budget Proposals

- a. Siva Gunda, Commissioner, California Energy Commission
- b. Drew Bohan, Executive Director, California Energy Commission
- c. Teresa Calvert, Program Budget Manager, Department of Finance
- d. Eamon Nalband, Staff Finance Budget Analyst, Department of Finance
- e. Ross Brown, Principal Fiscal & Policy Analyst, Legislative Analyst's Office

III. Stakeholder Panelist Comments

- a. Dr. James Bushnell, Professor of Economics, University of California, Davis
- b. Jan Smutny-Jones, Chief Executive Officer, The Independent Energy Producers Association
- c. Marc Joseph, Attorney, Coalition of California Utility Employees and the California State Association of Electric Workers
- d. Matthew Freedman, Staff Attorney, The Utility Reform Network
- e. Merrian Borgeson, Senior Scientist, Natural Resources Defense Council
- f. Brandon Dawson, Director, Sierra Club California

IV. Member Comments and Questions for the Panel

V. Public Comment

We encourage the public to provide written testimony before the hearing. Please send your written testimony to: BudgetSub3@asm.ca.gov. Please note that any written testimony submitted to the committee is considered public comment and may be read into the record or reprinted. All are encouraged to watch the hearing from its live stream on the Assembly's website at https://www.assembly.ca.gov/todaysevents.

The hearing room will be open for attendance of this hearing. Any member of the public attending a hearing is strongly encouraged to wear a mask at all times while in the building. The public may also participate in this hearing by telephone after all witnesses on all panels and issues have concluded, and after the conclusion of member questions.

A moderated telephone line will be available to assist with public participation. The public may provide comment by calling the following toll-free number: **877-692-8957**, Access Code: **131 54 44**.

BACKGROUND

The May Revision proposals include over \$8 billion in spending over the next four fiscal years, as well as \$1 billion over four years for Climate Innovation Grants. This includes statutory changes and tax and statutory changes related to developing a Lithium Valley near the Salton Sea. The funding includes:

2022-23 May Revision Energy Reliability, Relief and Clean Energy Investments (Dollars in Millions)

Investment Category	Program	Agency	2021-22	2022-23	2023-24	2024-25	2025-26	Energy Package Totals
Ratepayer Relief	California Arrearage Payment Program	CSD	\$0	\$1,200	\$0	\$0	\$0	\$1,200
	Capacity Building Grants	CPUC	\$0	\$30	\$0	\$0	\$0	\$30
Reliability Clean Energy	Investments in Strategic Reliability Assets	DWR	\$1,500	\$445	\$971	\$667	\$667	\$4,250
	Distributed Electricity Backup Assets	CEC	\$550	\$0	\$400	\$0	\$0	\$950
	Residential Solar & Storage	CPUC	\$0	\$70	\$900	\$0	\$0	\$970
	Transmission & Energy Financing	IBank	\$0	\$250	\$0	\$0	\$0	\$250
	Demand Side Grid support	CEC	\$200	\$0	\$95	\$0	\$0	\$295
	Carbon Removal	CEC	\$0	\$50	\$50	\$0	\$0	\$100
	Energy Data Modelling	CEC	\$0	\$5	\$0	\$0	\$0	\$5
	To	tals by FY	\$2,250	\$2,050	\$2,416	\$667	\$667	\$8,050

This proposal funds the following programs:

Community Services Development: California Arrearage Payment Program: \$1.2 billion

• Increases funding provided last year to cover \$1.2 billion of outstanding residential ratepayer electric and natural gas utility debt.

California Public Utilities Commission (CPUC): Capacity Building Grants: \$30 million

 Provides grants for non-profit, community-based organizations, including tribes, to participate in CPUC processes.

Department of Water Resources (DWR): Investments in Strategic Reliability Assets: \$4.25 billion

- Seeks to procure up to 5,000 megawatts (MW) of energy capacity from:
 - Extending the life of existing power plants set expire and providing capital capacity payments for efficiency upgrades and operations and maintenance costs for more reliable operation. This will be the majority of the capacity.
 - o Investments in new capacity that can be called upon in an emergency.
 - o Power purchase agreements to augment energy resources in and into California.

California Energy Commission (CEC): Distributed Electricity Backup Assets: \$950 million

- This provides funding to reduce emissions or replace existing back-up generators that are largely diesel and natural gas, including:
 - Incentives to deploy new zero or low emission technologies, including fuel cells, at existing or new facilities, and as replacements or to substantially improve the environmental performance of existing backup diesel generators. Operators would be required to provide energy to the grid during grid emergencies.
 - Incentives for air emission reduction technologies to be installed on large fossil back-up generators (those that are greater than 1MW). In exchange, owners of the back-up generators would be required to operate their equipment to support the grid during emergencies. Under some conditions they would be eligible for additional incentive payments through the complementary Demand-Side Grid Support program.
- In support of utility scale assets, the CEC, in consultation with the California Air Resources Board (CARB), will invest up to \$200 million in efficiency upgrades, maintenance, and incremental capacity additions at existing power generators that do not otherwise have contracts from any other source that would fund those upgrades. These projects could include onsite project modifications such as inlet chillers, hot gas path upgrades, emissions control, and cooling system upgrades. Funding could be provided for projects

that would improve system hardening and resiliency during earthquakes and extreme weather events including wildfires and floods (mudslides from excessive rains).

CPUC: Residential Solar & Storage: \$970 million

- Funds the CPUC's Self Generation Incentive Program (SGIP)
 - 70% of these funds would target residential low-income, tribal, and disadvantaged communities.
 - 30% for market rate battery storage systems.

IBank: Transmission & Energy Financing: \$250 million

- Provides revolving loans for transmission and energy projects identified by CAISO/CPUC.
- Initially will fund transmission from Salton Sea for geothermal.
- \$25 million for partnership with federal government DOE Energy Loan program.

CEC: Demand Side Grid Support: \$295 million

- Provides up front and load reduction payments to back up generators that can be called up during grid emergencies.
- This is similar to a program that was created last year with emergency funds that utilities could partner with large industrial customers to reduce load during grid emergencies. This will likely be diesel and natural gas backups.

CEC: Carbon Removal: \$100 million

 Provides grants for research, development, and demonstration grants for carbon capture projects.

CEC: Energy Data Modelling: \$5 million

Provides computing resources to analyze consumer data.

Trailer Bills

The May Revision also includes trailer bill language to:

• Establishes an optional permitting process at the Energy Commission for certain power plants that developers could apply to instead of applying to counties for a permit. The CEC would only be able to approve a project if the project provides overall net positive economic benefit to the local government, enters into one or more legally binding and enforceable community benefits agreements, and adheres to labor standards that ensure fairness and benefits for workers. This optional permitting process would require the preparation of an Environmental Impact Report (or EIR), rather than a negative

declaration or mitigated negative declaration for all applications that opt-in to this process and CEC would be required to provide additional, and earlier opportunities for public input than otherwise would be required by CEQA. Applicants would receive a determination on their proposed project within 270 days after an application is deemed complete, and have the environmental document and application subjected to a narrow time limit for judicial challenge. Eligible projects include: solar photovoltaic and land based wind over 50 megawatts, energy storage systems over 200 megawatt hours, and the manufacturing of specialized products integral to renewable energy or storage systems. This also includes related transmission lines that are proposed as part of a project to connect a project to the bulk transmission system (i.e. generator interconnection tie-line).

- Remove the statutory \$10 cap on residential fixed charges for investor owned utilities, and instead allows CPUC to determine fixed charges and stagger them by income.
- Allow CEC to set a planning reserve margin for publicly owned utilities in CAISO.
- Provides DWR and CEC broad exemptions to existing laws including the Public Contract Code, the Administrative Procedure Act, sole source contacting, CEQA, etc. in order to implement these funding programs.
- Authorizes the CPUC to share data with the CAISO confidentially.
- Creates an optional fund for Offshore Wind lessee to pay state costs.

CEC: Climate Innovation Grants- \$1 billion

- Provides \$1 billion over four years to fund research and development projects statewide at California based companies for projects including:
 - Advanced zero-emission transportation and mobility technologies
 - Offshore wind energy technologies
 - Wildfire prevention technologies
 - Energy-water desalination technology breakthroughs
 - Low-carbon chemicals and materials production
 - Lithium processing, manufacturing, and recovery
 - Regenerative Agriculture
 - Advanced computing for grid management
 - Climate-friendly cooling breakthrough technologies
 - In awarding grants, the CEC will consider whether the companies' investments are moving from a state that has enacted anti- LGBTQ+ or reproductive rights laws.

Lithium Valley

The May Revision includes funding and statutory changes in order to extract lithium from geothermal brine in the Salton Sea for the use in electric vehicle batteries, energy storage, and other consumer products. These proposals include:

- \$5 million to the CEC to support planning and community engagement in Imperial County related to geothermal development and lithium extraction and processing in the Salton Sea region consisting of:
 - up to \$3,850,000 for the County of Imperial to support its planning and environmental review of related activities and a health impact assessment,
 - up to \$350,000 for the County of Imperial to support activities of an ombudsperson, and
 - \$800,000 for grants to community-based organizations in Imperial County to support public engagement.
- This proposal includes trailer bill language to:
 - Streamline the permitting of geothermal facilities statewide, that would also support development of geothermal resources in the Salton Sea area,
 - Provide funding for mitigation measures for communities impacted by the development or production of geothermal resources,
 - Create a lithium extraction tax,
 - Update reporting and fee requirements for geothermal mining,
 - Create incentives for California-based projects that manufacture, process, or recover lithium, and
 - Add a process to provide funding for the restoration efforts at the Salton Sea and a community grant program to support the region.

LAO COMMENTS

This proposal raises questions about the degree to which the state faces risks of electricity outages and what actions the Legislature should take to address those challenges. The Legislature might want to delay action until later this summer to allow sufficient time to better understand the proposal and assess its merits. The May Revision includes \$8 billion General Fund over five years for various energy-related activities, including establishing a Strategic Electric Reliability Reserve aimed at promoting electric reliability (\$5.2 billion) and providing additional funding for the California Arrearages Payment Program to pay for overdue customer electricity bills that accrued during the pandemic (\$1.2 billion). The Legislative Analyst's Office (LAO) is still in the process of understanding the details of and waiting for additional information from the Administration on the proposed spending. Below, the LAO identifies some initial high-level questions for the Legislature to consider as it evaluates this proposal. We plan to provide more detailed information and comments in the coming days.

How Best to Balance Reliability, Affordability, and Environmental Goals? Overall, the May Revision proposal supports a mix of programs aimed at accomplishing three key energy goals: electric reliability, affordability, and environmental improvements. However, most of the May Revision funding goes to support electric reliability (\$6.7 billion, or 83 percent). In some cases, the activities proposed for funding present trade-offs between reliability and environmental

objectives. For example, some proposed activities would rely on generators that use fossil fuel (such as natural gas power plants or generators) to help improve reliability. The Legislature will want to consider how it prioritizes these different goals, and whether a different mix of funding and/or a different program design might better achieve its multiple priorities. As the Legislature considers how to prioritize funding across these different energy activities, the LAO recommends it also consider the Governor's January \$2 billion Clean Energy Investments proposal alongside the \$8 billion May Revision proposal to develop a comprehensive and coordinated strategy. In contrast to the May Revision, the January proposal largely prioritized programs intended to achieve environmental objectives.

What Is the Magnitude of the Reliability Problem? Several billion dollars would support various activities to ensure electric grid reliability during certain hours and seasons when there is greatest risk of an outage (typically in the evenings during the late summer). So far, the Administration has not clearly articulated the magnitude of the problem and the underlying analysis that is being used to assess the problem. For example, what is the risk of an outage over the next several years? In September 2021, the California Energy Commission (CEC) published a mid-term reliability analysis for 2023 through 2026. The report found that planned electricity procurements would meet the standard threshold used to determine electricity reliability—a one day in ten year "loss of load expectation" threshold. (Loss of load expectation is a measure of how likely it is that there will be an outage.) There have been several changes affecting electricity supply since this CEC analysis—including reduced hydroelectric resources and energy project delays—but the Administration has not provided any updated modeling. As a result, how much of a reliability risk exists over the next several years—and, correspondingly, how much funding the state should dedicate to preparing for shortages—is still unclear.

How Much Will This Proposal Help Address the Problem? It is currently unclear how much this proposal will decrease the risk of outages. For example, for each proposed activity, the Administration has not provided information on how much electricity capacity (in megawatts) would be added and how much the additional capacity would reduce the risk of an outage. Such an assessment is necessary for the Legislature to determine the degree to which each proposed activity helps improve reliability—in terms of reduced risk of outages—and whether the reliability benefits are worth the costs. It would also help the Legislature balance these reliability benefits against other state priorities that could be supported with these funds.

Which Programs Help Address the Reliability Problem Most Effectively? Assuming the Legislature agrees that additional action is needed to improve electric reliability, it will want to identify the actions that are most likely to achieve those goals effectively and at the lowest possible costs. Furthermore, the Legislature will want to consider whether it is appropriate for the state to fund and administer these reliability resources, rather than relying on the typical approach that relies on utilities to procure the resources and is funded by electric ratepayers.

How Does This Proposal Fit With Broader State General Fund Budget Constraints? In the Initial Comments on the Governor's May Revision, the LAO recommended that the Legislature identify several billion dollars in spending that is non-excluded under the state appropriations limit (SAL) and instead dedicate those funds to reserves. Most of this package proposal is SAL excludable. However, some pieces—such as \$200 million for demand side grid support—is non-excludable. As a result, the Legislature might want to consider rejecting this part of the proposal

and instead putting those funds in reserve. To the extent it views these activities as high priorities, it could look to identify alternative funding sources to support them, such as electric ratepayer funding. Moreover, even for the SAL-excludable components of this package, the Legislature could choose a different mix of activities to prioritize, either within the energy policy area or by redirecting funding to other high-priority categories of SAL-excludable activities across the budget. The Legislature might also want to limit or reject out-year General Fund spending commitments included in this package, given future state budget risks.

When Does the Legislature Need to Act? Of the total \$8 billion proposed, a significant amount would be allocated as an amendment to the 2021-22 budget (\$2.25 billion) or as part of the 2022-23 budget (\$2.05 billion). This represents a substantial amount of funding, much of which would support new programs that the Legislature will not have much time to assess before its constitutional deadline to pass a budget in June. The Legislature might want to delay action on many of the items in this package until later this summer. (The Legislature might need to take other actions to address its 2021-22 SAL requirements under this approach.) This would give the Legislature more time to better understand the proposals and evaluate the merits. Although quicker action could allow some of the activities to proceed sooner, it is the LAO's understanding that many of the reliability benefits would not accrue until at least 2023.

STAFF COMMENTS

To better understand these proposals, the Legislature may wish to ask:

CEC/CAISO

- Can you describe the scope of our reliability challenges that necessitate this spending
 and statutory authority? Under a medium case scenario, how many days a year do you
 expect that we would have stage 2 emergencies or rolling blackouts (stage 3) without
 these resources? Do these estimates change over the 5 year period that these items
 would be funded?
- Why is this suite of resources more cost effective than aggressive demand response programs to address short term reliability challenges?

CEC/DWR

- Why do you need broad statutory exemptions from existing law, especially years into the future, including CEQA, Public Contract Code, sole source contracting, etc.?
- How will we ensure public oversight and participation as well as ensuring we are paying a fair price for these resources?
- How much additional capacity will be made available and when by each of the reliability programs proposed?
- How will you reduce emissions from the fossil fuel resources you will procure?
- By funding new and existing fossil fuel resources, will you effectively be funding the costs
 of compliance with air quality requirements for the owners of those resources?

 Will fossil fuel back-up generation or extended power plants be located in disadvantaged communities or severe or extreme non-attainment air basins?

CPUC/CAISO

• The Strategic Reliability Reserve proposal includes significant procurement directly by the state. Why is that a more effective way of increasing system capacity compared to existing tools, including procurement by load serving entities to meet Resource Adequacy obligations, Reliability Must Run designations for critical facilities by the CAISO, or resource solicitations issued by the CAISO through its Capacity Procurement Mechanism?

CEC

Why are you proposing a streamlined CEQA process at the state level when that is not
offered to renewable generation that is sited at the county level? Won't this encourage
every project to seek state siting?

CPUC

- Will changes to fixed charges increase or decrease equity in how costs are assessed on ratepayers?
- Can you provide us a range of fixed charges that may be enacted under this trailer bill?
- How will utilities verify income when it changes often?